

EveryLine

For more than 15 years, the most proven and most efficient method of heat recovery





**A healthy and
comfortable
indoor climate**

with the Ned Air EveryLine

Made in Holland

Ned Air is an innovative company specializing in air treatment technology. For more than 30 years we have been designing and manufacturing air handling units for many sectors. We do this.

The Ned Air EveryLine is a series of energy-efficient air handling units with heat recovery. With the EveryLine you can quickly and easily achieve a healthy and comfortable indoor climate for any desired space. The EveryLine meets the ErP requirements, has a long service life and offers many possibilities in terms of design, cooling, heating, control technology, accessories and additional components.

The versatile EveryLine series offers 9 models with air flow rates ranging from 350 to 12,500 m³/h and sizes, all with a sleek design, extensive choices and accessories and uniform basic construction. All technical data can be found later in this brochure.





EveryLine in a nutshell

Fresh air for everyone, that's the mission of Ned Air. That is why we have been producing and supplying air air treatment systems to sectors such as education, utilities, industry, agriculture and maritime. The EveryLine is a series of energy-efficient air handling units with heat and humidity recovery and has the following features:

- Maximum thermal comfort of 90%
- Energy-efficient EC fans
- Low Total Cost of Ownership
- Energy investment deduction possible
- Very complete as standard
- ErP proof

Attractive design

Flexible and durable

All EveryLine models have a clear structure. Basically, all models have a three main sections. A section with filters, a section with the heat exchanger and a section with fans. If you want to expand your air handling unit with, for example, a heating heating coil or silencers, then this is possible. During the manufacturing process This is because we can flexibly add sections desired components to your cabinet.

Check out pages 17 and 18 for all the components we offer. In the technical documentation of the EveryLine shows what the consequences for the cabinet dimensions.

The filter section contains as standard an F7 filter for the supply air and an M5 filter for the exhaust air. Both guarantee clean inlet and outlet air. If extra high hygiene standards are required in operating theatres, for example, special filters are available on request.

The heat exchanger section contains our patented Air Separation Module (LSM), which optimally transfers the heat from the outgoing air stream transferred to the incoming air stream. The LSM comes standard with a bypass to allow summer night ventilation.

The fan section contains two or four energy-efficient EC fans, depending depending on the model you choose.



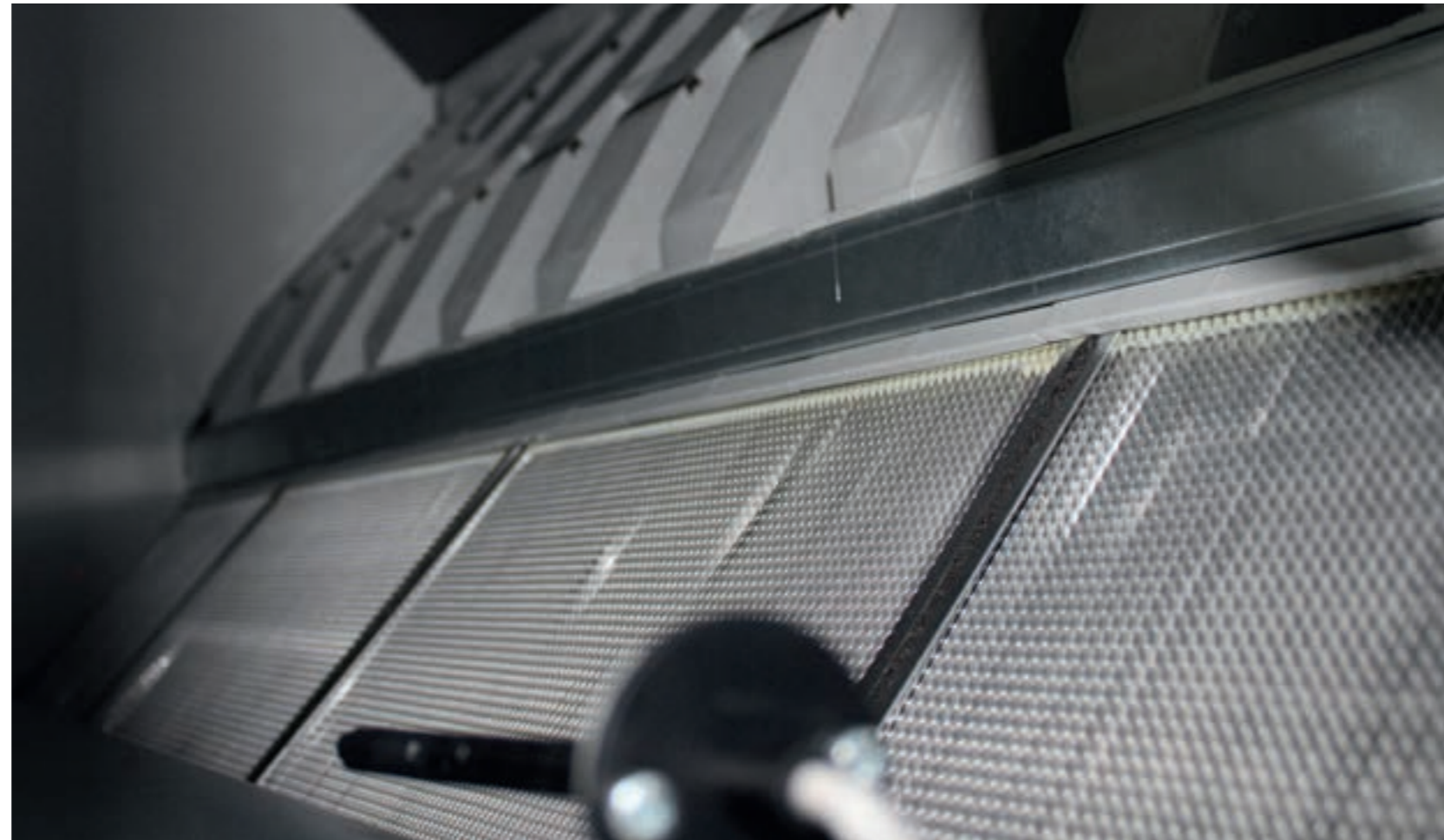
The unique Air Separation Module (LSM)

The EveryLine is equipped with a unique, patented Air Separation Module (LSM). The LSM combines two counterflow plate exchangers into one unit, with the main advantage that this makes a much more compact construction of the cabinet enables. A bypass face valve is fitted as standard. With this valve summer night ventilation (free cooling) can be realized. The EveryLine gives you optimal control of the indoor climate with the lowest possible energy consumption.

The main advantage of the LSM is that it saves a lot of space. The LSM is more compact than individual plate exchangers and therefore the EveryLine holds its compact dimensions. In addition the bypass is integrated into the LSM and there is no separate part and no additional mounting required.

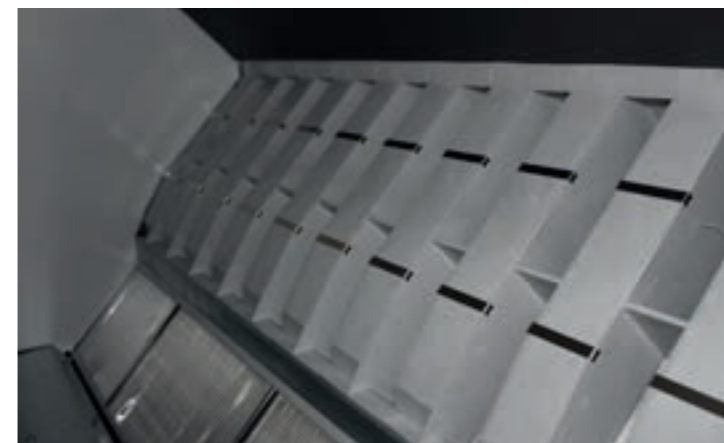
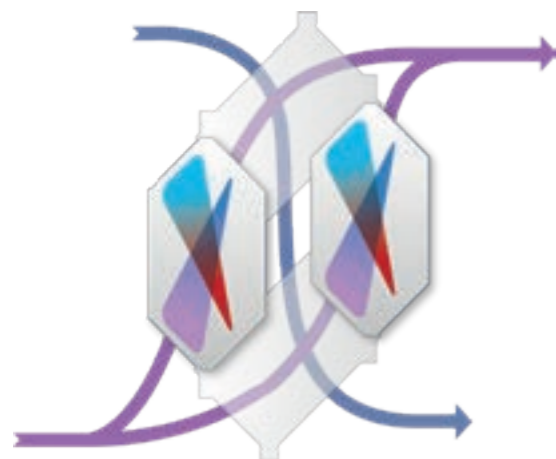
LSM with open bypass

The air flows through the bypass and not through the heat exchanger. No heat exchange takes place.



LSM with closed bypass

Air flows through the plate exchangers. Heat exchange takes place.



Robust housing

The casing of the EveryLine consists of 44 mm thick sandwich panels. The panels consist of sendzimir-galvanized steel with a plastic coating and are filled with insulation material. These sturdy panels create an airtight cabinet. The RotorLine has hinged doors with an “elevator & turn” closure.

Optional removable panels (inspection hatches) can be installed. Also these are equipped with handles. Removable panels are useful when the cabinet is in a small space is placed and there is insufficient space

to open hinged doors. In either case, all functions are easily accessible for maintenance and inspection. The panels are insulated with environmentally friendly and fire-resistant rock wool. The high thermal insulation value of the stone wool prevents condensation and energy loss. The insulation is moisture resistant, making it insensitive to microorganisms. In addition, the insulation material provides additional acoustic damping.





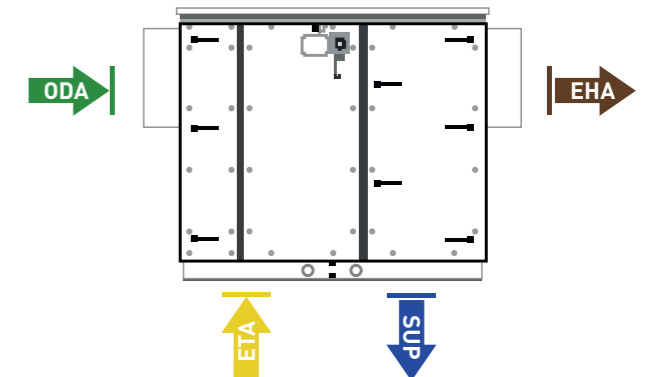
Solid outdoor

The nine EveryLine models are all available in four variants, depending on whether you want an indoor or outdoor installation and which way of connection you prefer: bottom connection, top connection or end connection.

There are two types of outdoor setups, which differ in the method of connection. Outdoor setups are equipped as standard with drip traps and a roof, unlike contrast to indoor setups. Below are the schematic representations of the two types of outdoor setups.

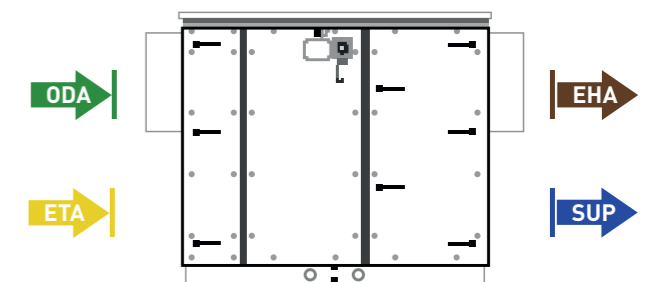
Type A

Outdoor setup with bottom connection



Type B

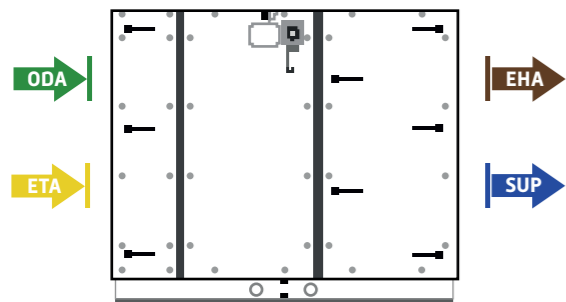
Outdoor setup with side connection



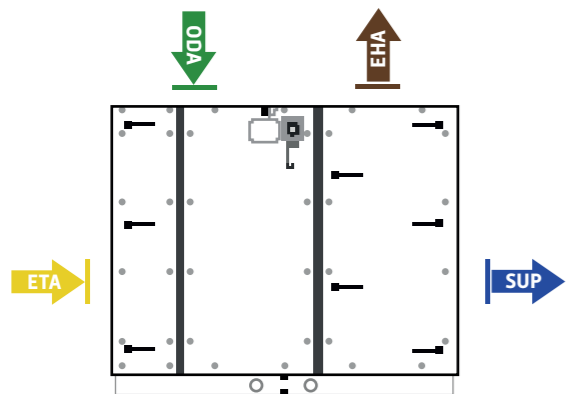
Tight indoor arrangement

There are two types of indoor setups, which differ in the way they are connected. Type C has side connections and type D has top and side connections. Below are the schematic representations of both types of indoor setups.

Type C
Indoor arrangement with side connection



Type D
Indoor arrangement with top and side connection



Additional components

Wide choice of additional components

The EveryLine can be equipped with numerous additional components. In this way you can configure the air handling unit to your specific needs. To give you an impression of the possibilities, you will find an overview on these pages. If you have additional requirements, please contact the sales department. They will be happy to help you.



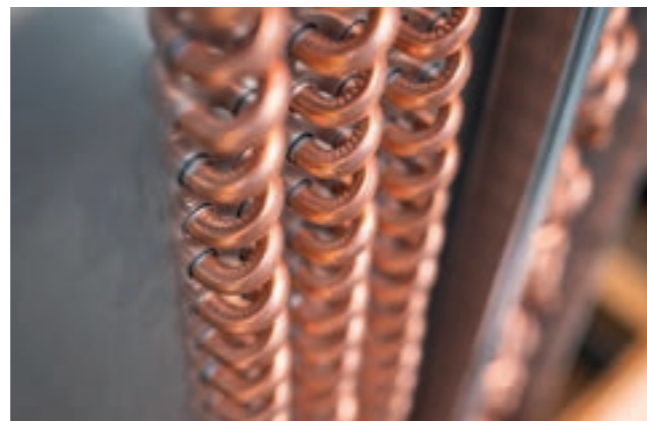
A **heater** or reheater heats the air to a desired temperature, either electrically or with water.



With **air valves**, air flows to and from outside can be completely shut off.



The **silencers** or **coulisse dampers** keep the amount of noise produced by the air handling unit produced within the desired standards.



A **cooling coil** or **cold water coil** cools the air flowing through the air handling system.

Ned Air EveryLine



A **cooling battery DX** has the same function as a water-based cooling battery, but uses a refrigerant as the cooling medium.

A **plenum section** is an empty section that can function as an expansion section or recessed section for components supplied by third parties.

Changeover battery can both cool and heating. This battery can operate on water, but is also available in DX, that is, with a refrigerant.

Accessories

In addition to the many components we can add to your air handling unit, we can also provide a number of smaller accessories. Most of these accessories can be found on these pages. A complete overview of accessories can be found in the technical documentation of the EveryLine.

Other accessories:

- **Channel adapter**his makes it possible to convert a rectangular connection to a round duct.
- **Web-based controller** for connecting your EveryLine to the internet. This allows you to graphically display the operation. You can also control the unit on any mobile device from a remote location.
- **Manometer:** This measures the pressure loss across the filter. With this allows you to quickly assess whether the filter is dirty.
- **Custom colors** At your request we can supply the EveryLine Available in any color scheme you wish. Treatment with a special coating is also possible.
- An **electronic pressure transmitter** transforms the measured pressure into an electronic signal. The pressure transmitter is being used as a filterguard or as a pressure controller.



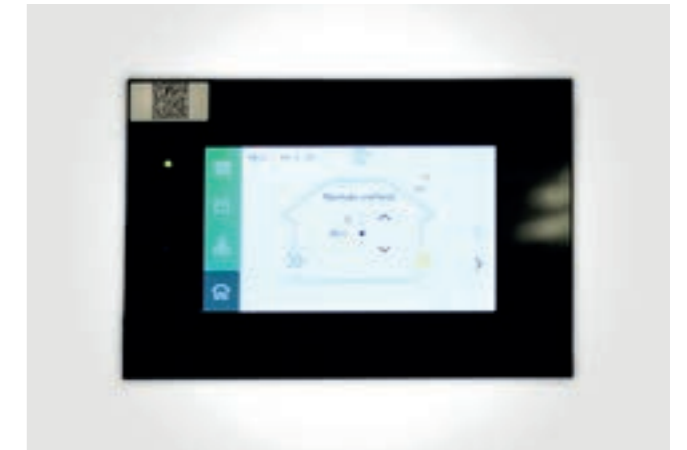
Differential pressure switch: effective measuring instrument to assess there is differential pressure across the filter and whether filters need to be replaced.



Balsifon: allows condensation water from the air handling unit directly into the sewer.



The CO₂-sensor: sensor measures and monitors the CO₂ content of the indoor air flowing through the cabinet.



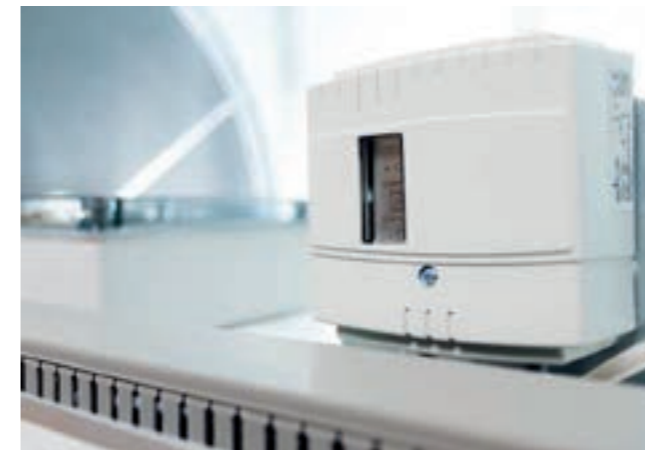
Touchscreen: for optimum ease of operation.



Stainless steel sheet metal: as housing: hygienic and sleek.



Extra set of filters: handy when the current filters need are due for replacement.



Frost thermostat: for measuring the battery temperature.



Air filters keep supply and return air clean. Ned Air offers a wide range of premium air filters. This means there is always a suitable solution for every specific application, such as filtering particulate matter.

All-electric within reach

Many installers, when purchasing an air handler for a cabinet with included heat pumps. This has the following advantages over connection to existing central heating systems:

1. Step toward all-electric:

While central heating systems still run on gas, the heat pumps we can supply with the RotorLine can provide run on electricity. Ideal if you want to detach your building from gas. Then heat pumps are a perfect choice.

2. Saving time and materials:

An air handling unit with heat pumps no longer needs to be connected to existing central heating systems or cooling machines.

3. One point of contact during commissioning:

Because the air handling units and heat pumps are delivered on the same frame there is only one installer who is responsible for commissioning the system.

4. Sustainable:

Electric heat pumps do not emit any CO₂ and do not use fossil fuels.

5. Higher energy label:

Application of heat pumps contribute to a higher energy label and lower energy consumption.



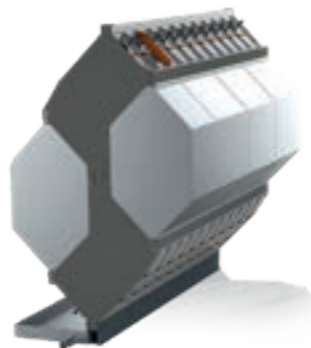


Sophisticated and cost-effective

If you invest in a new air handling unit, then this investment does not stop at the purchase price and installation costs. Throughout the lifetime of the cabinet, you will also face additional costs, including energy, maintenance, disposal and recycling costs. Together, these make up the Total Cost of Ownership (TCO).

In developing the EveryLine, we have carefully considered how to keep this TCO as low as possible. Among other things, we optimized the dimensions in order to keep the air speed as low as possible and the combination of low air velocity and the large filter surface area guarantee a longer life of the filters. This keeps the maintenance costs low.

The **LSM module** built into all EveryLines, is automatically controlled by our control technology. This creates an optimal indoor climate at the lowest possible energy consumption.



The combination of a low air velocity with large filter surface area ensures a longer service life of the filters. This reduces maintenance costs.



The **EC fans** are energy efficient and have a high efficiency. This saves energy costs and has a positive impact on the total cost of ownership.



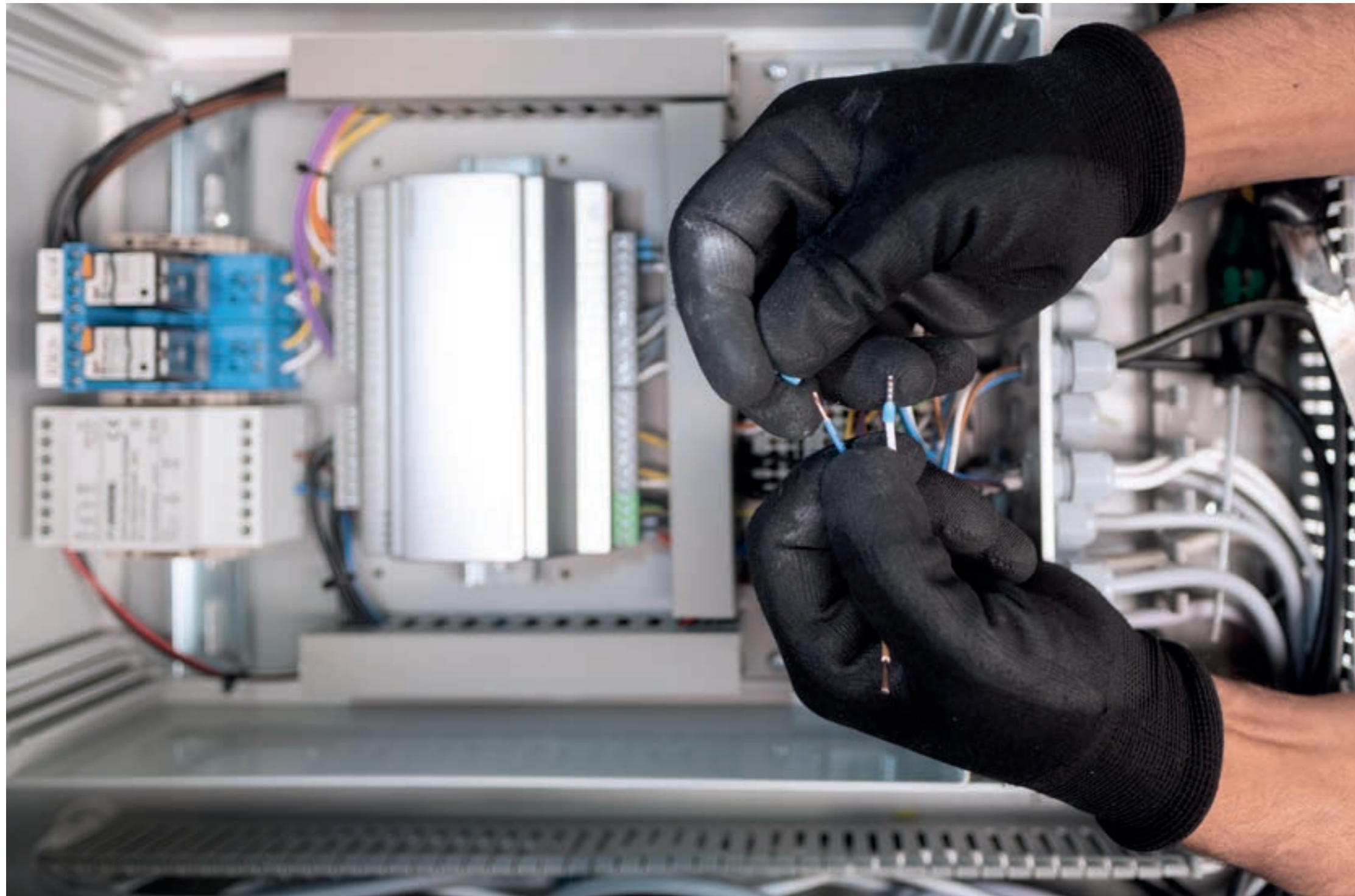
Control technology

Full freedom of choice

All EveryLine air handling units we perform with full wiring. The air handling unit is standard equipped with a control. The complete wiring is connected by us. If you choose to apply your own measurement and control that is possible. You just need to connect

a supply cable to the main switch and connect your control to our terminal strip. Our controller (Regin) has a built-in web server allowing the EveryLine unit 24/7 can be read location independently via a web browser. For this, only a network cable (TCP/IP) has to

be connected to the unit. Optionally, we also supply a Ned Air remote control. This allows you to control the EveryLine unit easily from your building. The control technical description is so that the software in your control can be optimally tuned to your EveryLine.



Terminal strip with connected Regin-controller



We are Team Ned Air

Ned Air has for every technical air question a ready-made solution. We always strive to be at the forefront of the market ahead of the market. We do this with passion with our entire team of experts.

Some 4 characteristics are therefore strongly embedded in our organization: Together, Expert, Agile and Ownership. These form our basis and are therefore essential in everything we do.

Collaboration



We believe in the power of collaboration. With our customers, partners and experts synergy and achieve the best results. We listen to your needs and wishes and create the most effective solutions together with you. Together we build a healthy and sustainable living environment.

Expert



More than 30 years of passion for air treatment. With our experience and knowledge in the field of air treatment we are expert professionals. We are up to aware of the latest developments and can therefore always provide the most sustainable solutions. We like to take on complex challenges and offer with our products reliable solutions that meet the highest standards.



Flexibility

The world around us is changing rapidly and that is why flexibility is key. Because of our size and working method we are agile and we can quickly adapt to your wishes and specific needs.



Ownership

We take ownership of the entire process, from initial contact to to after-sales service. We strive to be your reliable partner and take responsibility for the successful implementation of air technology solutions. We ensure a streamlined process and provide appropriate support.

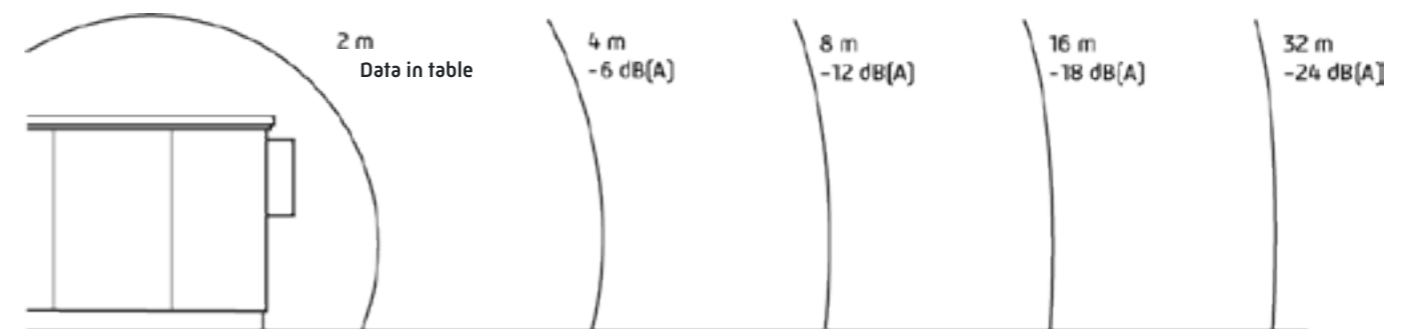
Innovative strength is in our DNA. We are always at the forefront of the air treatment industry. We provide you with high-quality solutions that contribute to a healthy and comfortable indoor climate. This is how we give substance to our mission.

Technical data

Technical data (according to EIA requirements)*

Data	Unit	Model									
		1000	2000	3000	4000	5000	6000	8000	10000	12000	
Min. air volume	(m³/h)	350	550	850	950	1.300	1.700	1.950	2.350	2.850	
Max. air volume (ErP)	(m³/h)	1.400	2.700	3.200	4.500	5.700	7.200	8.500	11.000	12.500	
External pressure	Pa	200	200	200	200	250	250	250	300	300	
Power (ErP)	(kW)	0,9	1,5	1,7	2,2	3,1	3,9	4,9	6,2	9	
η dry	(%)	76	76	77	76	77	77	77	77	77	
η wet	(%)	87	87	87	87	87	87	87	87	87	
SFPint	(W/m³/s)	913	966	803	729	710	766	767	781	749	
V-casing	(m/s)	1,69	1,71	1,48	1,51	1,51	1,91	1,86	1,55	1,5	
V-class	(class)	V2	V2	V1	V1	V1	V3	V3	V1	V1	
H-class	(class)	H1	H1	H1	H1	H1	H1	H1	H1	H1	
P-class	(class)	P1	P1	P1	P1	P1	P1	P1	P1	P1	

* The ErP requirements are always mandatory, while you can determine whether you want to qualify for the EIA. The EIA requirements are more stringent than the ErP requirements, which means that a unit that qualifies eligible for the EIA has different specifications than a unit that only meets the ErP.



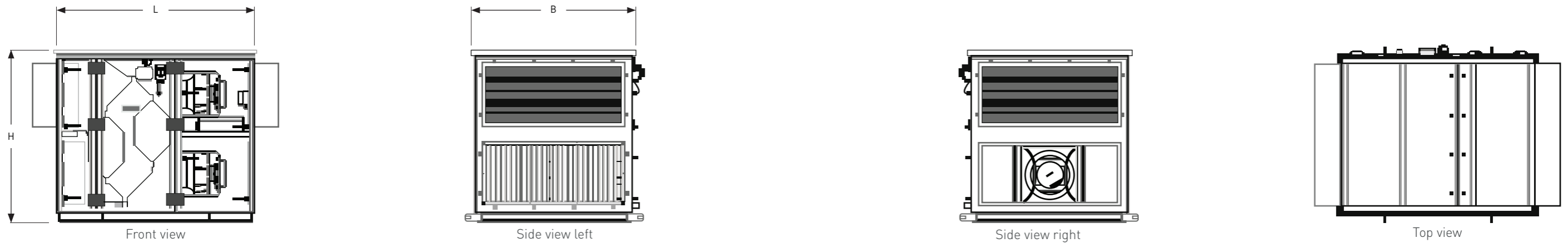
Technical data per EveryLine model according to EIA requirements

Model	Max. air volume**	External pressure (Pa)	Produced dB(A)*				
			2 m	4 m	8 m	16 m	32 m
1000	1.700	200	66	60	54	48	42
2000	2.700	200	71	65	59	53	47
3000	3.200	200	75	69	63	57	51
4000	4.500	200	69	63	57	51	45
5000	5.700	250	73	67	61	55	49
6000	7.200	250	75	69	63	57	51
8000	8.500	250	78	72	66	60	54
10000	11.000	300	75	69	63	57	51
12000	12.500	300	76	70	64	58	52

* ref. 10⁻¹² W.

** For all models, the ErP requirements were assumed, at 100% control, measured on the discharge side of the unit.

Dimensions & weights

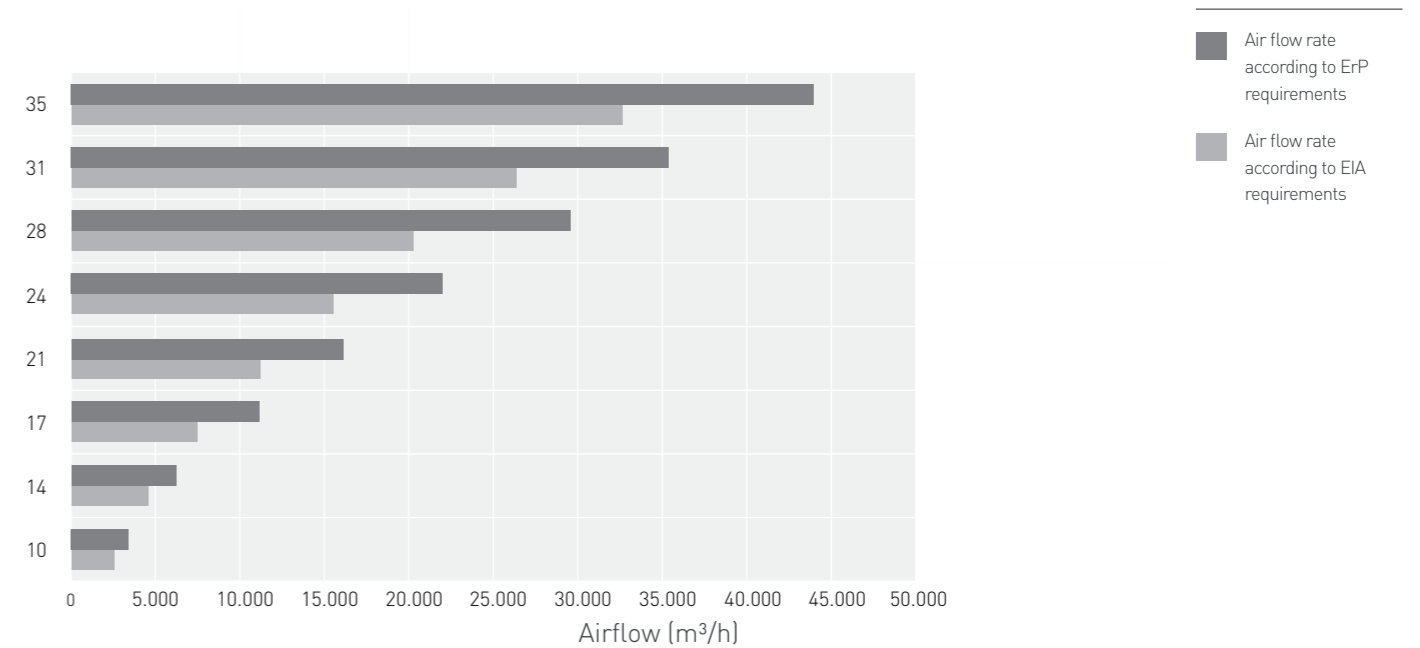


Dimensions and weights per EveryLine model

Data	Unit	Model								
		1000	2000	3000	4000	5000	6000	8000	10000	12000
L: length type A	(mm)	1.750	1.750	1.750	2.100	2.100	2.450	2.450	2.800	2.800
L: length type B	(mm)	1.400	1.750	1.750	1.750	1.750	2.100	2.450	2.800	2.800
L: length type C	(mm)	1.400	1.750	1.750	1.750	1.750	2.100	2.450	2.800	2.800
L: length type D	(mm)	1.750	1.750	1.750	2.100	2.100	2.450	2.450	2.800	2.800
B: width type A, B, C, D	(mm)	700	1.050	1.400	1.400	1.750	1.750	2.100	2.100	2.450
H: height type A, B, C, D*	(mm)	1.050	1.050	1.050	1.400	1.400	1.400	1.400	2.100	2.100
Weight type A	(kg)	392	516	638	859	1.013	1.149	1.319	1.922	2.159
Weight type B	(kg)	350	516	638	805	953	1.089	1.319	1.922	2.159
Weight type C	(kg)	317	465	572	733	866	997	1.206	1.793	2.014
Weight type D	(kg)	356	465	572	783	921	1.052	1.206	1.793	2.014

* Length and width do not include drip catcher dimensions. Drip catchers are 210 mm deep for all models. Dimensions do not include frame height. Models 10 through 24 have a frame height of 80 mm. Model 28 has a frame height of 100 mm.

Quick selection: which EveryLine do you need?



Ned Air more than 30 years sense of business

The EveryLine has been developed by our own technical experts developed with care. The complete manufacturing takes place in our production facility in Kampen. Based on innovative entrepreneurship, we offer clients products we are proud of.

Interested in what Ned Air has to offer you? Look at nedair.nl/products/rotorline or call/email our sales department at +31 38 33 70 833 / verkoop@nedair.nl



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